WATER-BASED INK JET PRINTER

ABSTRACT OF THE DISCLOSURE

A printer that includes at least one printhead mounted to a carriage of a printing system, and a secondary ink container mounted to the carriage and which holds an ink and is in fluid communication with the at least one printhead. A pressure source in fluid communication with the secondary ink container provides a pressure to the secondary ink container during a purging operation to cause the ink to flow from the at least one printhead. The secondary ink container has a large enough volume to hold a sufficient amount of ink for a purge operation of at least about seven seconds. The secondary ink container has a minimum ink level, and an inlet that is located below the minium ink level so as to minimize aeration of the ink as it flows through the inlet. The printer can also include a manifold having a pair of inlets, each inlet providing ink to a respective printhead, and a connector which connects the secondary ink container to the manifold, and diverts the ink to the respective manifold inlets before the ink enters the manifold. A filter can be used to filter the ink before it enters the secondary ink container, the filter having a vertical orientation to minimize the accumulation of air in the filter.